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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,684	11/19/2001	Corey M. Grove	DAM 557-01	5881
24211	7590	05/18/2005	EXAMINER	
US ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND OFFICE OF THE CHIEF COUNSEL/IP TEAM (BLDG E4435) 5183 BLACKHAWK ROAD APG, MD 21010-5424			MENDOZA, MICHAEL G	
			ART UNIT	PAPER NUMBER
			3731	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/992,684

Applicant(s)

GROVE ET AL.

Examiner

Michael G. Mendoza

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,10-12 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,10-12 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see remarks on pg. 2, filed 4 May 2005, with respect to the rejection(s) of claim(s) 1 and 17 under 35 U.S.C. § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Vogliano.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show head harness 35 engaging the back of a user's head as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top

Art Unit: 3731

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. 1, 3, 4, 6, 7, 10, 11, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallet 4817596 in view of Vogliano 5191882.

5. Gallet teaches a modular helmet-mask assembly which comprises: a helmet comprising an impact resistant material; a face protection assembly comprising: a face protection shell; a vision port; a flexible nose cup (see figure) comprising a breathe-through airflow assembly and a filter unit (col. 1, lines 10-13); a flexible face seal (col. 4, lines 33-37); an adjustable head harness (see figure); a transparent, impact resistant lens rotatably attached at front part of the helmet (col. 5, lines 14-22); a transparent, impact resistant lens fixed to the vision port; wherein the impact resistant lens comprises polycarbonate, polyurethane, or combination thereof (col. 5, lines 21-22); wherein the face seal and nose cup comprise an elastic material (col. 4, lines 33-37); and wherein the filter unit comprises a filter element comprising a material capable of filtering chemical vapors and biological aerosols (col. 1, lines 10-13). It should be noted

Art Unit: 3731

that Gallet fails to specifically teach wherein the face protection shell comprises an impact resistant material. However it would have been obvious to one of ordinary skill in the art at the time the invention was made to use impact resistant material in situations where the mask could be damaged (firefighting/police raids) to prevent breakage. It should also be noted that Gallet fails to teach the adjustable head harness is attached at a surface of the shell or the face seal which is capable of engaging the back of a user's head.

6. Vogliano teaches a apparatus with a common adjustable head harness attached at a surface of the shell or the face seal which is capable of engaging the back of a user's head. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the adjustable head harness of Vogliano with the modular helmet-mask assembly of Gallet to allow the face protection assembly to be worn without the use of the helmet (see abstract).

7. As to claim 11, Gallet/Vogliano discloses the claimed invention except for the filter element comprises a carbon filter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a carbon filter since it was known in that carbon filters are effective for removing harmful gases.

8. Claims 2, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallet/Vogliano as applied to claims 1, 2, and 17 above, and further in view of Lane 5555569.

Art Unit: 3731

9. Gallet/Vogliano teaches the modular helmet-mask assembly of claim 1. It should be noted that Gallet/Vogliano fails to teach a position adjustable pad attached at rear part of the helmet, or a tightening adjustment knob/lever.

10. Lane teaches an assembly with a common pad and knob for securing a helmet on a wear's head (see figures). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the pad and knob for allowing adjustment of the fit of the helmet when the helmet is donned (col. 4, lines 47-56).

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gallet/Vogliano in view of Epperson et al. 6279172.

12. Gallet/Vogliano teaches the helmet-assembly of claim 1. It should be noted that Gallet/Vogliano fails to specifically teach the impact resistant shell material comprises graphite, fiberglass, or combinations thereof.

13. Epperson et al. teaches an assembly with common impact resistant material. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the graphite of Epperson et al. for its strong and lightweight properties (col. 3, lines 28-29).

### ***Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Mendoza whose telephone number is (571) 272-4698. The examiner can normally be reached on Mon.-Fri. 8:00 a.m. - 5:00 p.m..

Art Unit: 3731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on (571) 272-44963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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GLENN K. DAWSON  
PRIMARY EXAMINER